

ARCHITECTURE DEPARTMENT

CHINESE UNIVERSITY OF HONG KONG

MASTER OF ARCHITECTURE PROGRAMME

2008-2009

DESIGN REPORT



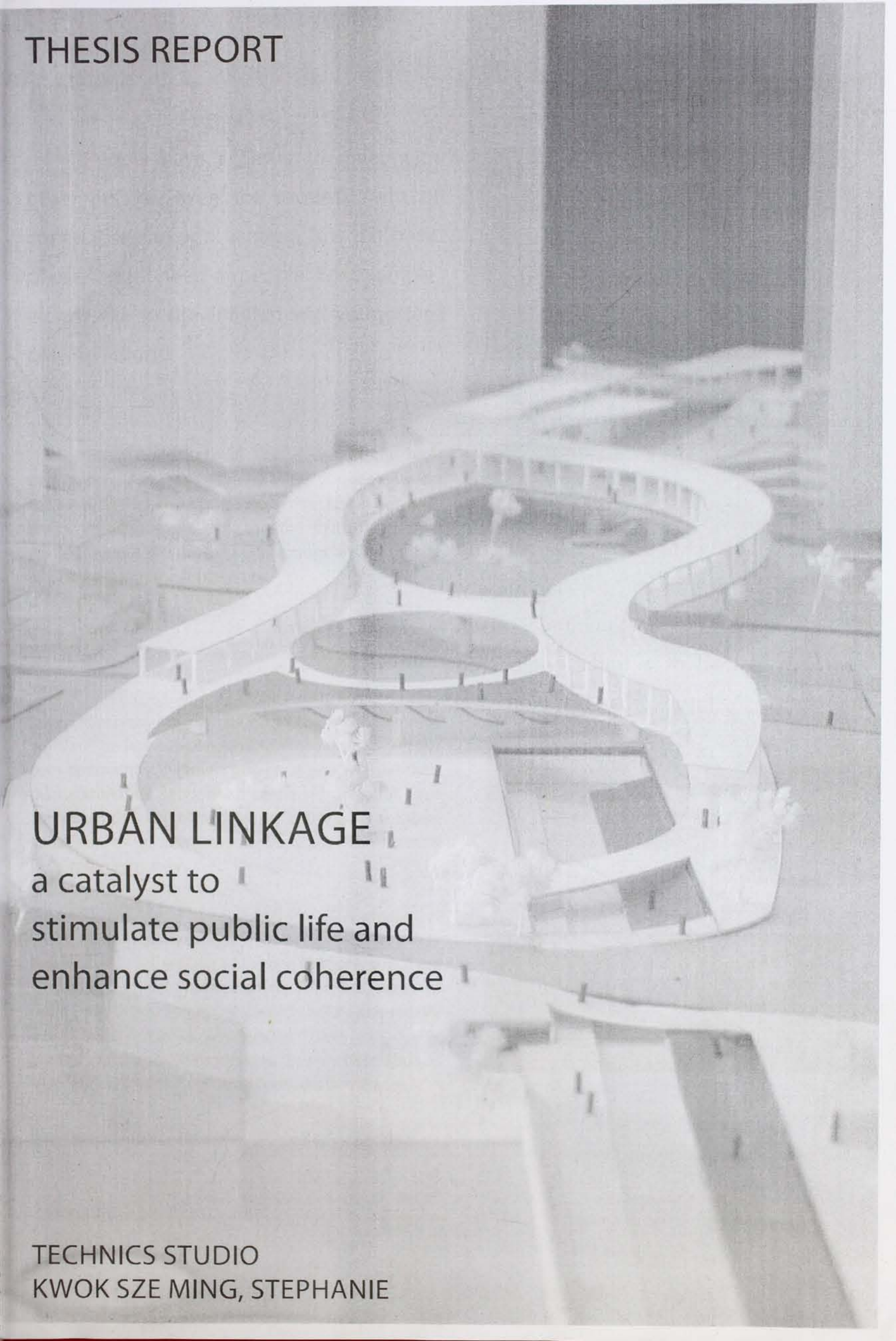
**URBAN LINKAGE:
A CATALYST TO STIMULATE PUBLIC
LIFE AND ENHANCE SOCIAL COHERENCE**

KWOK Sze Ming Stephanie

May 2009



THESIS REPORT



URBAN LINKAGE

a catalyst to
stimulate public life and
enhance social coherence

TECHNICS STUDIO
KWOK SZE MING, STEPHANIE

THESIS STATEMENT

This thesis is to explore how urban linkage as a catalyst to stimulate new public life and eliminate segregations in the community, and the possibilities of a community driven approach instead of a traffic engineered approach in the future urban planning.

ABSTRACT

People have a desire to meet with other people, even the modest form of contact, seeing and hearing. It is the basic physiological need of people. For example, elderly like to see children and youngsters playing around.



Hong Kong is small. People live in the high density area. Although different kinds of people live in the same district, there is not much interaction between them. Although we are living together in the district, we are segregated. We have no interactions and the sense of belongings in the community.



Everyday we directly go to the MTR station to work and go home in the evening. We seldom stay in our own community. Different groups of people have their own community network which usually does not have any interfaces with other groups. In the current urban situations, the disadvantage groups are even isolated from the community.



Elderly always stay at the places near where they live, such as small garden and sitting out area, which are very limited in some of the districts. There are more and more elderly housing estates, which isolate the elderly from the community. Disables' activities are usually limited by the facilities designs. Low-income class is discriminated in the high level consumption places.



PROBLEMS IN HONG KONG

Hong Kong is also proud of the high-connectivity. Yes, it is highly connected between districts. We have well developed public transportation systems, e.g. MTR, buses, minibuses, etc.

However, the connectivity within the district is weak. There are many engineering efficient bridges to link up buildings. The community is not linked up though these links.



There community is segregated by 3 reasons:

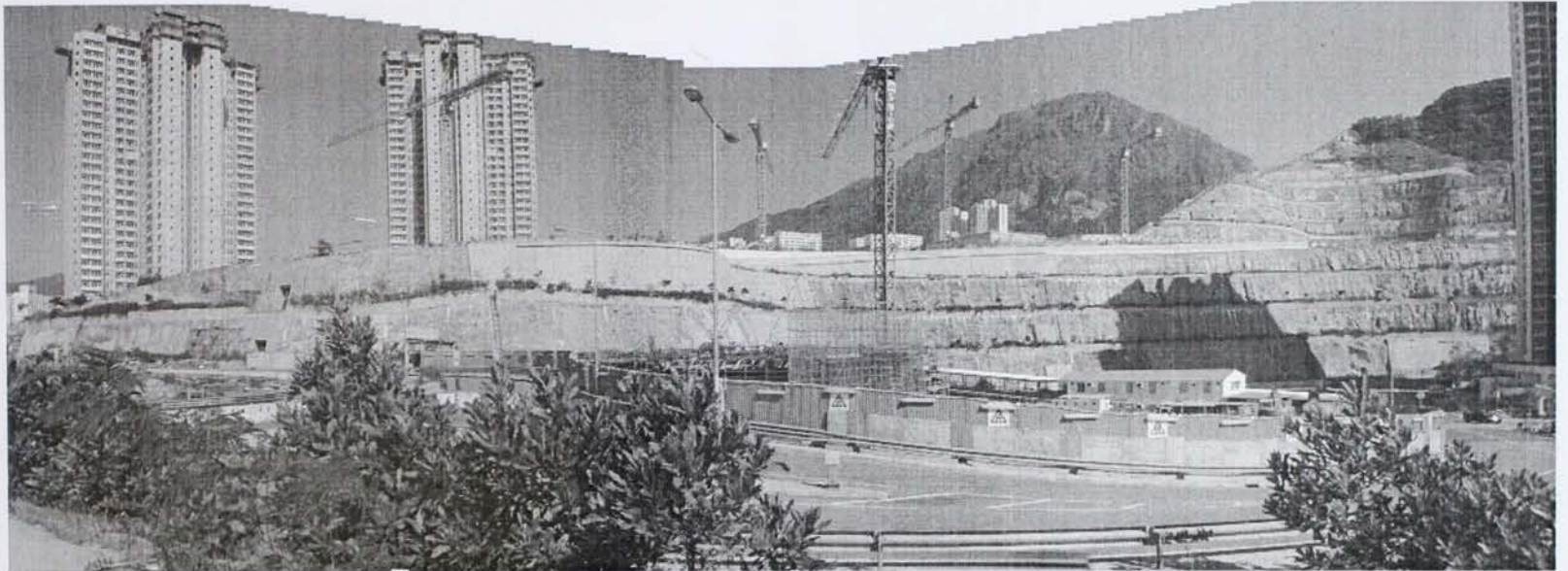
1 Traffic-oriented planning approach

Roads are dominated in the urban design, especially in the new developed areas. Wide roads with the high speeds of vehicles are unfavorable for the pedestrians. The roads also cut the lands into separated lots.



2 Topography

Hong Kong is a hilly city. There is not much flat land for developments. We have to build buildings on the hillsides. Levels are changing and form the natural barrier for connections with other levels.



3 Different phases of developments

The city is developing continuously. Different zones are developed at different phases in the district. The new buildings usually developed individually without considering the interactions with the existing buildings.



Base on the 3 reasons, the city is fragmented. Without an effective linking network and common grounds for the different groups of people to interact, the community is falling apart.

HYPOTHESIS

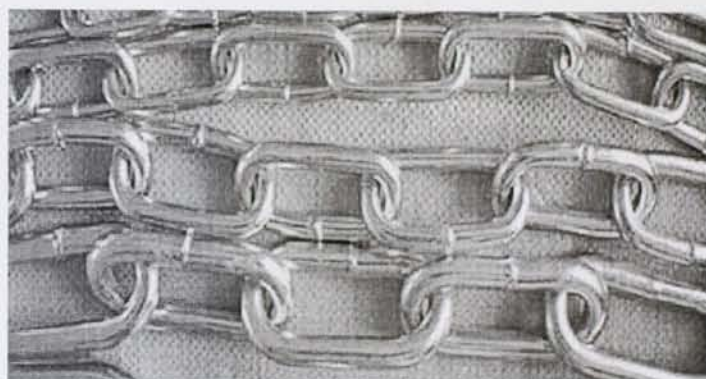
With an effective urban linkage, different groups of people in the district can be held together. Urban linkage acts as a catalyst to re-create the sense of belongings in the community, stimulate new public life and eliminate segregations.

Linkage

"Linkage is simply the glue of the city. It is the act by which we unite all the layers of activity and resulting physical form in the city."

"Urban design is concerned with the question of making comprehensible links between discrete things. As a corollary, it is concerned with making an extremely large entity comprehensible by articulation its parts."

(Investigations into Collective Form, Fumihiko Maki, 1964)

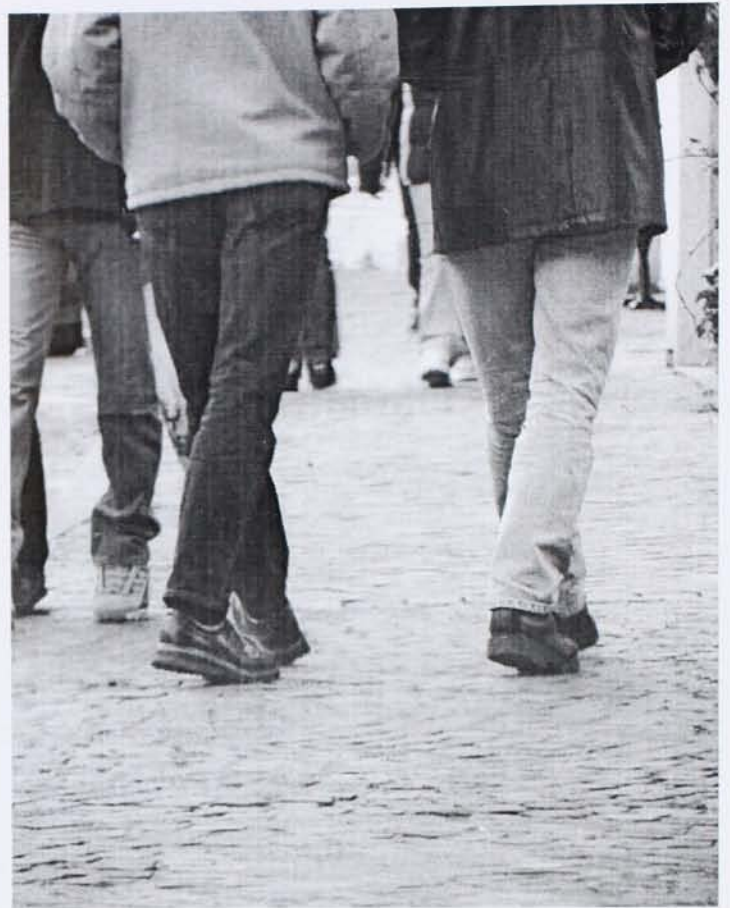


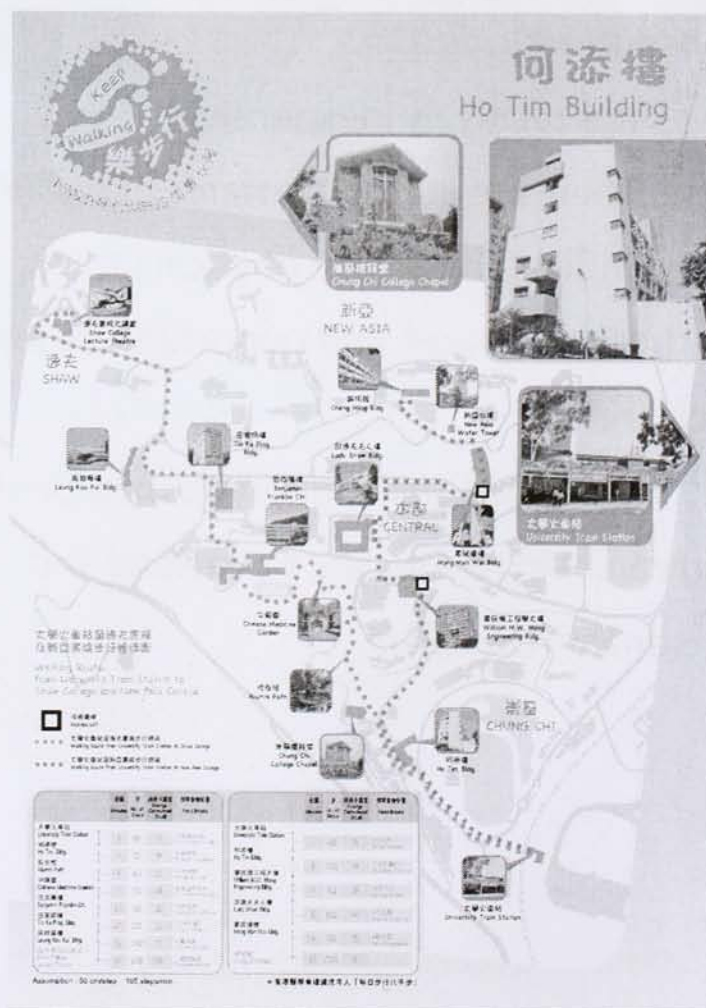
PEDESTRIAN: WALKING

Walking is the oldest, most basic, most affordable, and most accessible of human transportation modes. It is a great method of travel for short trips from home or work as well as trips connecting to transit for longer journeys. Every trip, whether primarily by private automobile, bus, bike or train, includes a walking component.

Benefits associated with walking:

1. It allows for tremendous flexibility in movement, as it is not limited to roads or transit tracks
2. The space requirements are minimal when compared to other means of transportation.
3. It is relatively inexpensive.
4. There are intrinsic rewards of walking to the individual include physical fitness, aesthetic pleasures, and opportunities for socializing.
5. Increased walking can be therapeutic and can help to alleviate behavioral and personality disorders.





Pedestrianization

Although there are so many benefits associated with walking, pedestrian is always ignored by most transportation experts. It is believed that walking is ignored because it does not directly lead to major problems.

Development of pedestrianization

Far back in history, conflicts between traffic and pedestrian already started. In ancient Rome, when night fell, heavy carts were excluded from the innermost core of the town by stone obstructions.

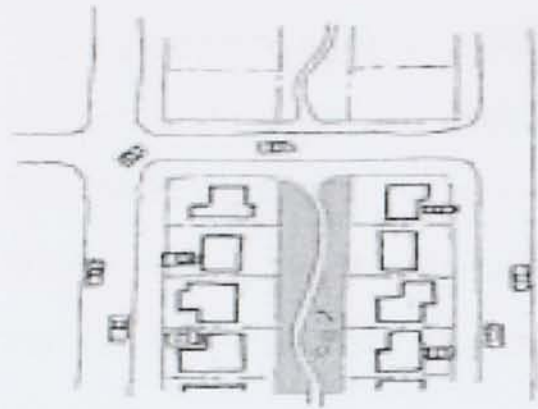
Leonardo da Vinci designed a split-level system for pedestrians and vehicular traffic.

In the 19th century, the horizontal separation of pedestrian and carriage traffic into footpath and roadway was widespread. In the 20th century, the concept of separating pedestrians from motor vehicles is even stronger.



Design Guideline of Pedestrian Environment

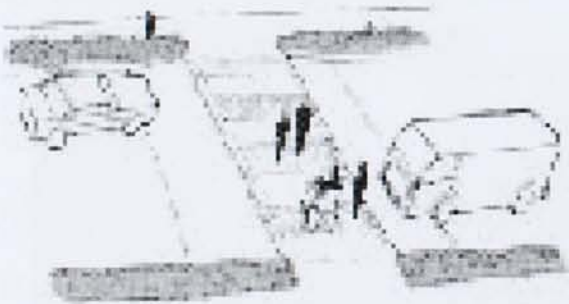
According to "Urban Design Guidelines for Hong Kong", published by Planning Department, there are several guidelines for the pedestrian environment.



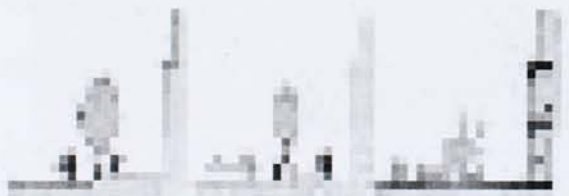
Provide pedestrian priority facilities, such as pedestrianised streets, to encourage segregation of vehicles and pedestrians where appropriate



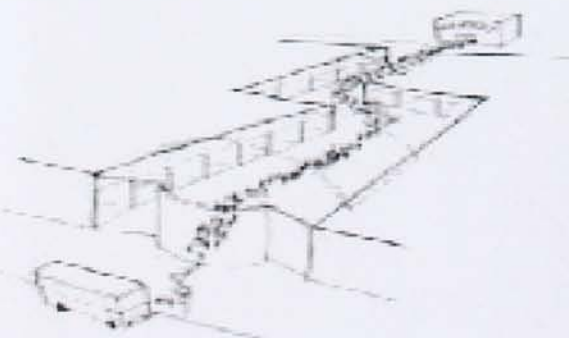
Integrate the provision of pedestrian linkages with that of open space networks.



Introduce traffic calming measures such as speed bumps and raised crossings to minimise the conflict between vehicles and pedestrians.



Provide safe, clean, accessible and interesting environments



Provide direct pedestrian linkages between activity nodes and places of interest.
Enhance the attractiveness of these linkages by providing active frontage and wider streets interspersed with open spaces and green nodes

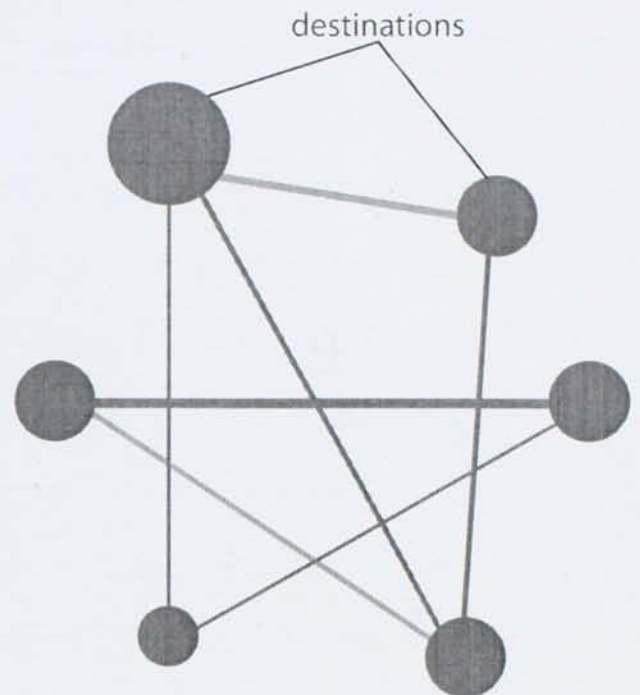
Link

A simple link connecting 2 destinations



Network

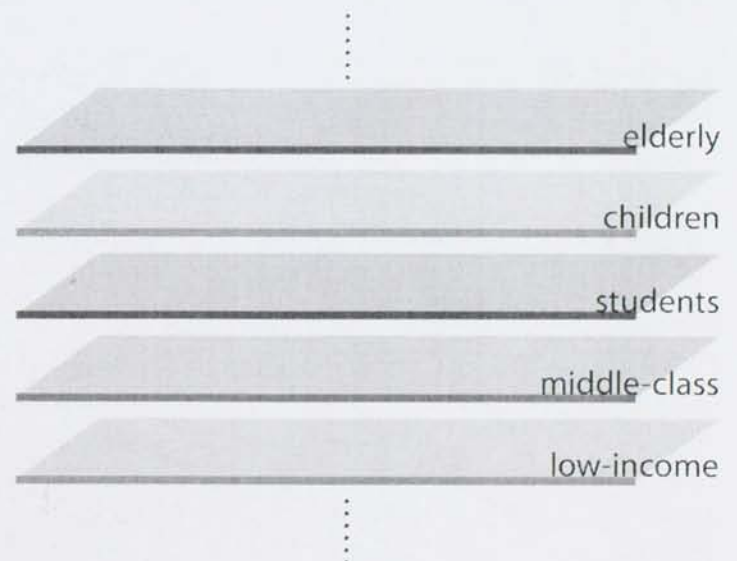
When there are more and more destinations, links become a network.



Layers of networks

Different groups of people have different needs, interests, walking speeds, etc.

It forms layers of networks.



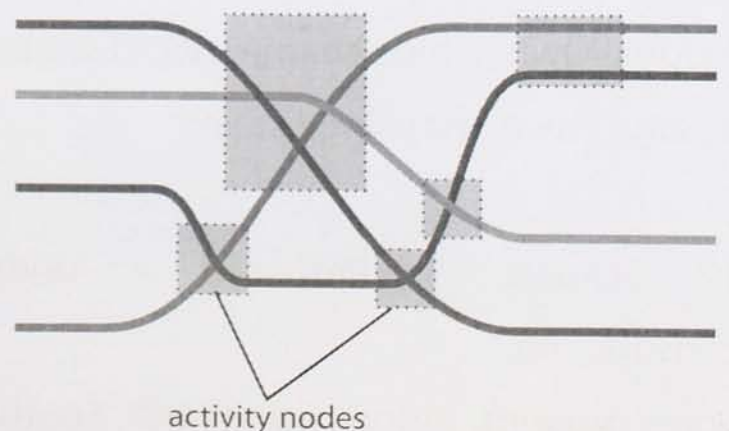
Integrations of networks

Different layers of networks should not be always parallel.

They should integrate together.

Activity nodes are at the intersecting points.

It provides opportunities for different groups of people to interact and meet each other.



PROPOSED SITE

Kowloon Bay

It is an old district. Different social classes are living in the district. There are old public estates, large private estate, newly built public estates.

The roads and topography are the physical barriers separating people. People are limited in their living environment. As there are many public estate which living spaces are relative smaller, there are larger demands of the public spaces. However, the public facilities are unevenly distributed. They cannot be easily accessed.

Population: Around 40,000 live in public housing

25,000 live in HOS estates

45,000 live in private housing

5 Public Estates, 4 Proposed / Under-construction Public Estates

4 Home Ownership Scheme (HOS) Estates

2 Large Private Housing Estates

12 Schools, 3 Proposed / Under-construction

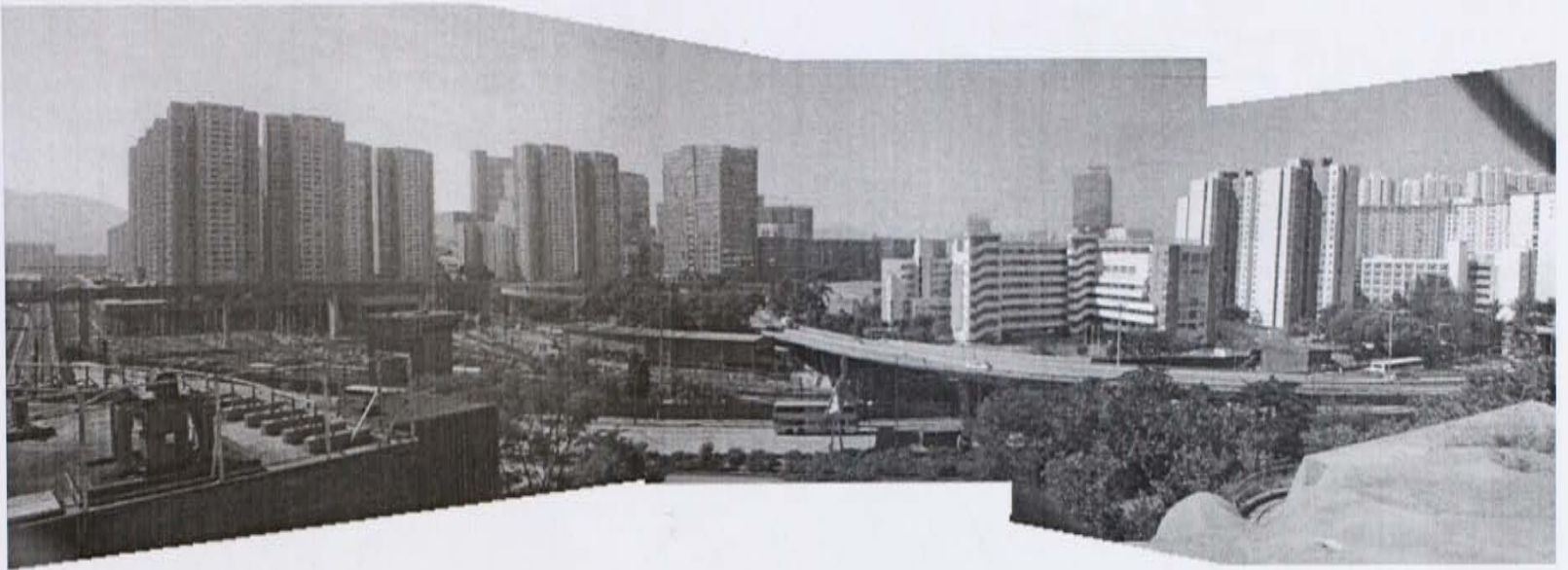
Sport grounds, Indoor games hall, Football fields, basketball courts, bicycle park

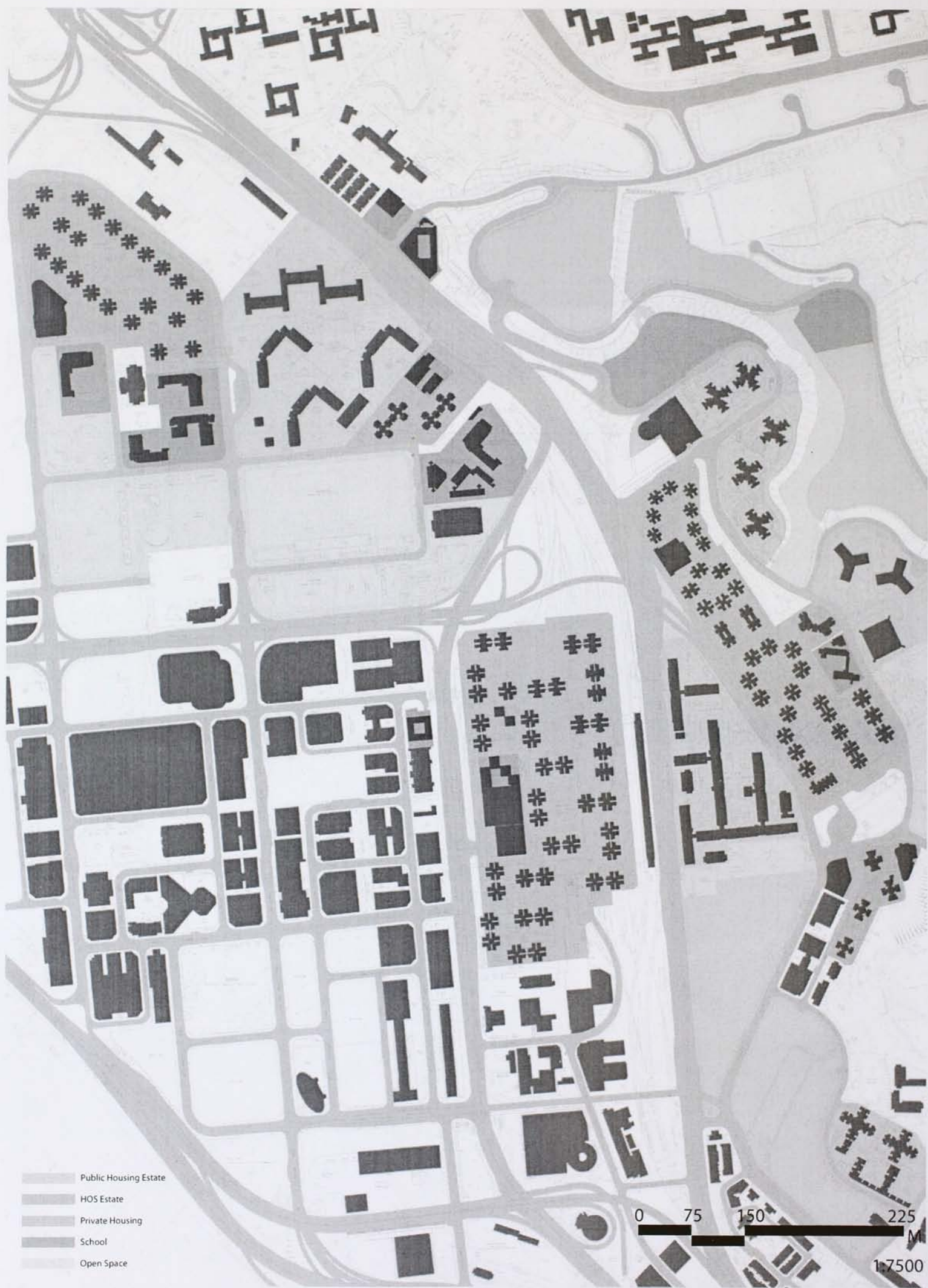


Aerial View
1:10000

Site Photos







- Public Housing Estate
- HOS Estate
- Private Housing
- School
- Open Space

0 75 150 225 M
1:7500

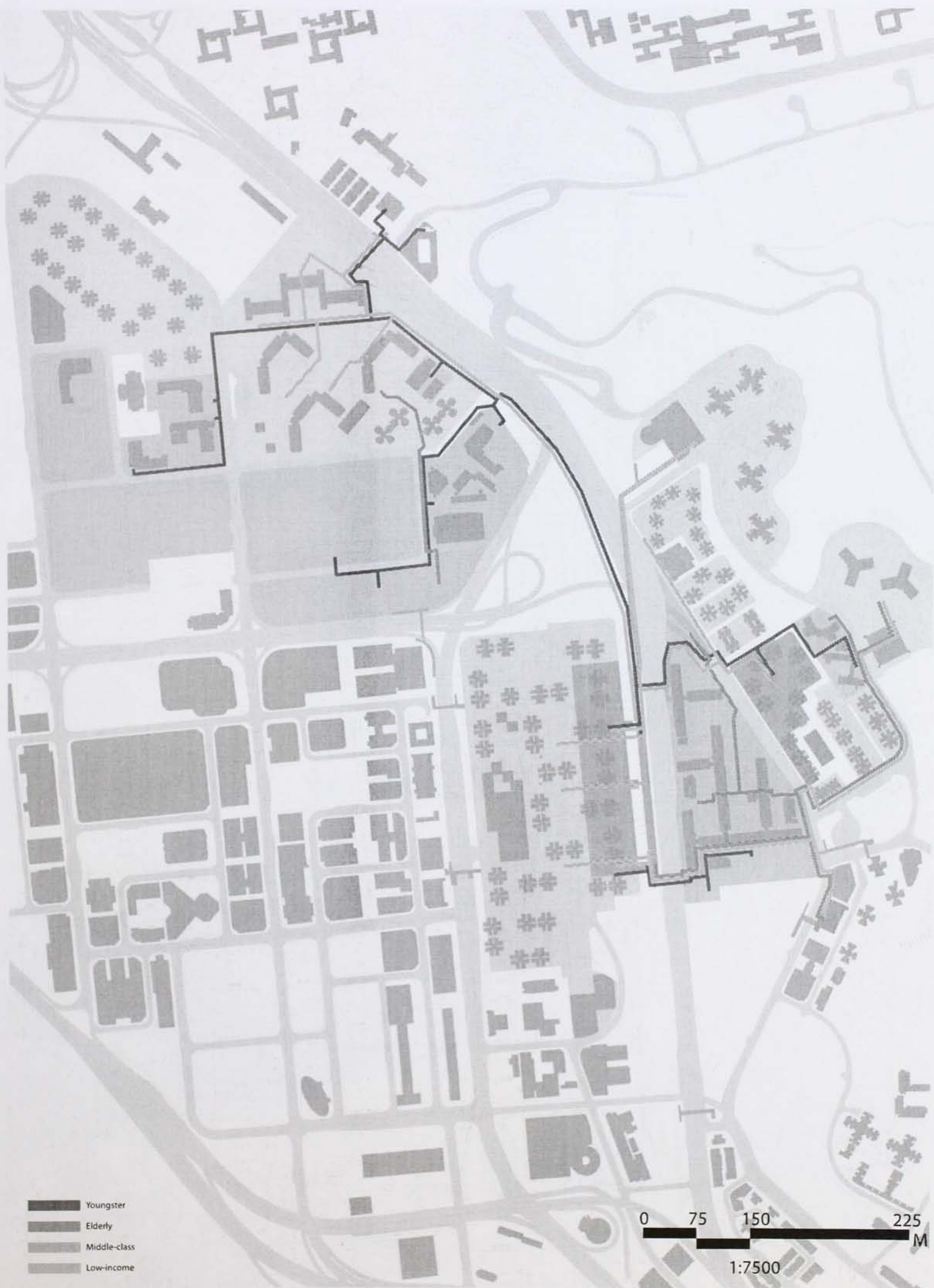
Building Types



Building Age



Traffics and Connections

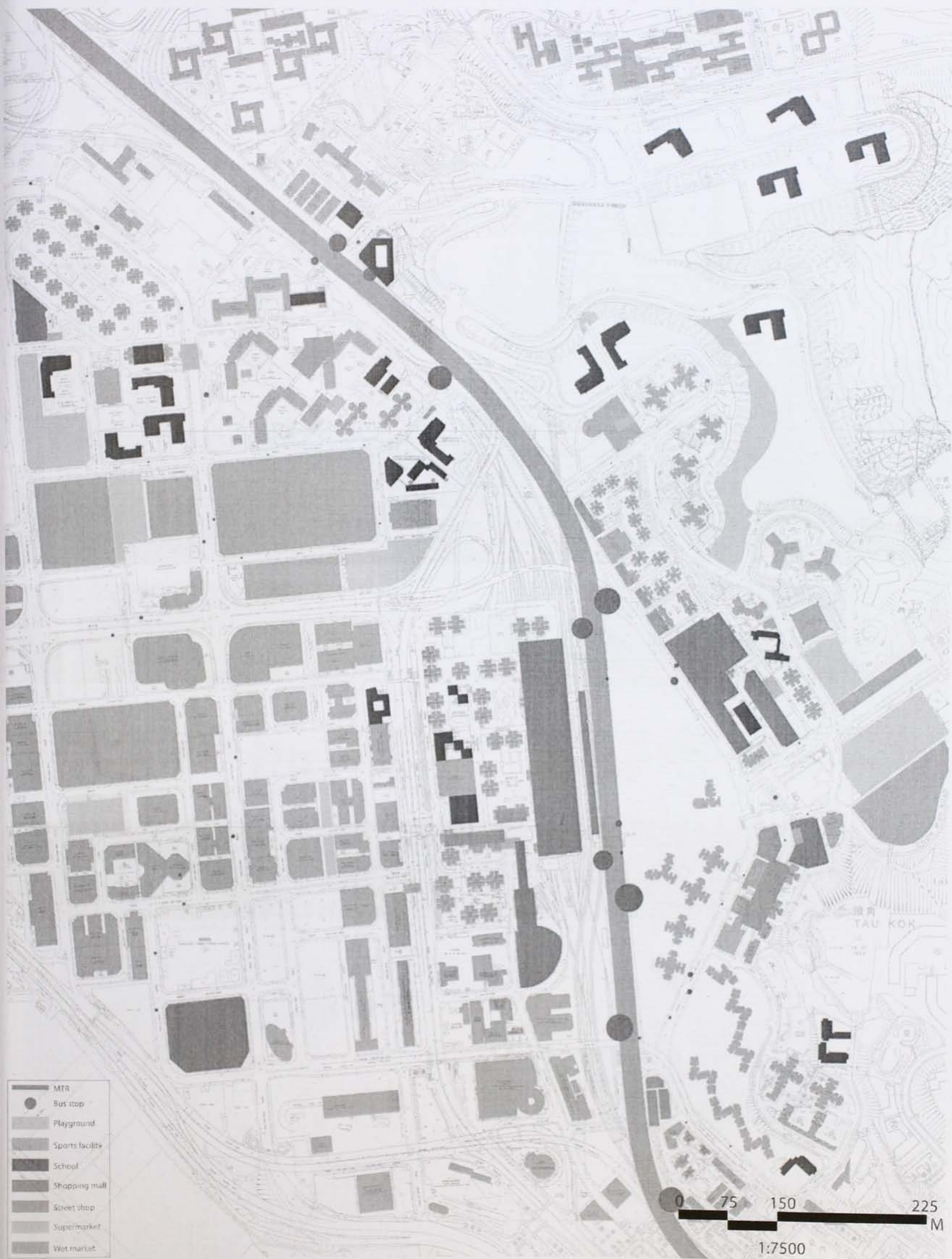


Activity Path of Different groups

Residents from different social class



Uneven distribution of public facilities



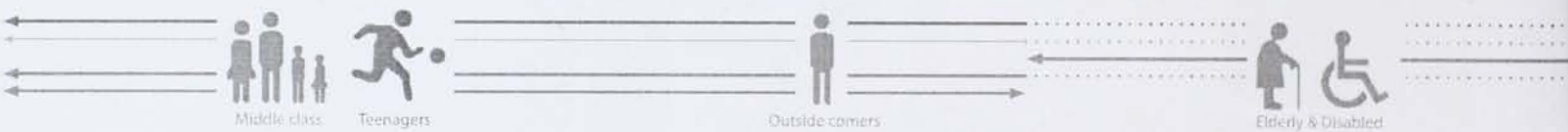
Site Section showing the living condition, activity zones and activities between different social groups



Telford Garden - Private Housing Estate



Lower Ngau Tau Kok Estate - Public Housing Estate (be demolished soon)



Shopping in shopping mall



Traveling to other districts



Sitting and gathering

Shopping in local stores



Amoy Garden - Private Housing Estate



Cheerful Court - Elderly Housing



Choi Hui Estate - Public Housing Estate



Shopping in shopping mall



Daily caring



Sitting and wandering

Residents' daily movement



LADY (30+)
05/12/2008 (FRIDAY)
12:34 - 12:49
SUNNY DAY (19°C)
FROM KAI YIP ESTATE
TO ANDY GARDENS (HSBC)



OLD LADY (60+)
08/12/2008 (MONDAY)
17:26 - 17:38
CLOUDY DAY (19°C)
FROM ANDY GARDENS
TO HONG KONG JOCKEY CLUB



OLD LADY (70+)
08/12/2008 (MONDAY)
16:57 - 17:07
SUNNY DAY (19°C)
FROM KOWLOON BAY MTR STATION
TO CHEERFUL COURT



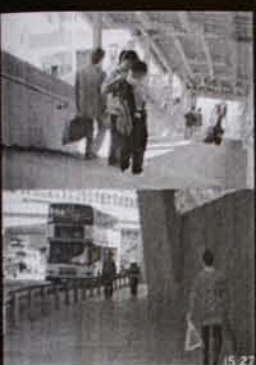
SECONDARY SCHOOL STUDENT
07/12/2008 (SUNDAY)
11:35 - 11:59
SUNNY DAY (17°C)
FROM KAI YIP ESTATE
TO SECONDARY SCHOOL



SECONDARY SCHOOL STUDENT
07/12/2008 (SUNDAY)
11:35 - 11:59
SUNNY DAY (17°C)
FROM KAI YIP ESTATE
TO SECONDARY SCHOOL



SECONDARY SCHOOL STUDENT
07/12/2008 (SUNDAY)
11:35 - 11:59
SUNNY DAY (17°C)
FROM KAI YIP ESTATE
TO SECONDARY SCHOOL



MOTHER AND SON
12/12/2008 (FRIDAY)
15:27 - 15:35
SUNNY DAY (20°C)
FROM KAI YIP ESTATE
TO LOWER NGAU TAU KOK ESTATE



OLD LADY (70+)
12/12/2008 (FRIDAY)
16:24 - 16:34
SUNNY DAY (20°C)
FROM NGAU TAU KOK MARKET
TO LEE KEE BUILDING



COUPLE AND OLD LADY
12/12/2008 (FRIDAY)
15:34 - 15:42
SUNNY DAY (20°C)
FROM AMOY GARDENS
TO KOWLOON BAY MTR STATION



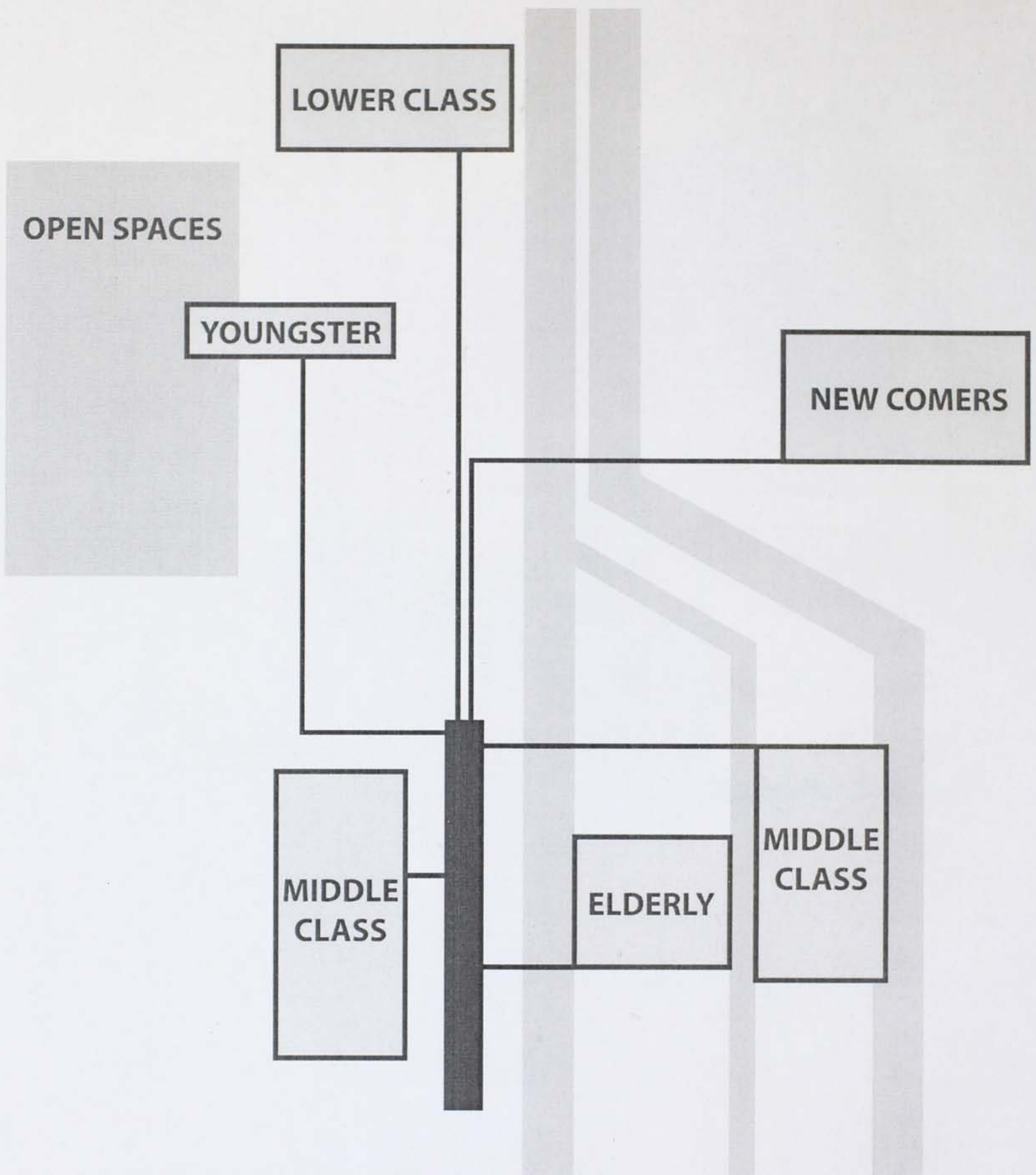
DECORATION WORKER (AROUND 40)
10/12/2008 (WEDNESDAY)
18:21 - 18:27
COOL EVENING (19°C)
FROM CHOI YING ESTATE
TO BUS STOP (NGAU TAU KOK ROAD)



YOUNG COUPLE AND DAUGHTER
12/12/2008 (FRIDAY)
16:07 - 16:12
SUNNY DAY (20°C)
FROM AMOY GARDENS
TO SIU KING BUILDING

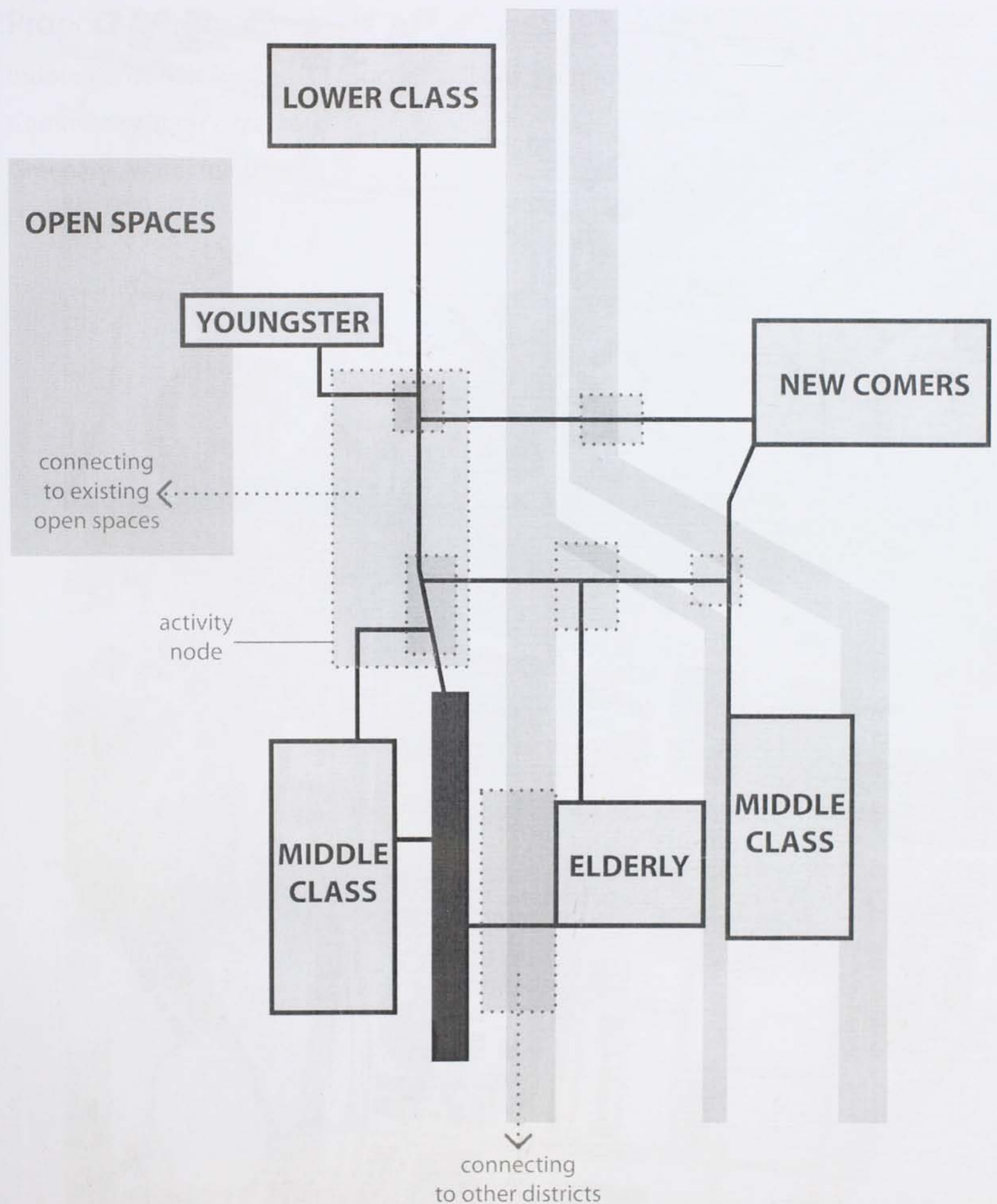


EARLY IDEAS



Seperated links

Different groups of people have different links connecting to the MTR station.
They do not have interactions between different paths.



Integrated network with activity nodes

Reorganizing the links and introducing activity nodes at the intersecting points

Providing opportunities for different groups of people to interact

EARLY IDEAS

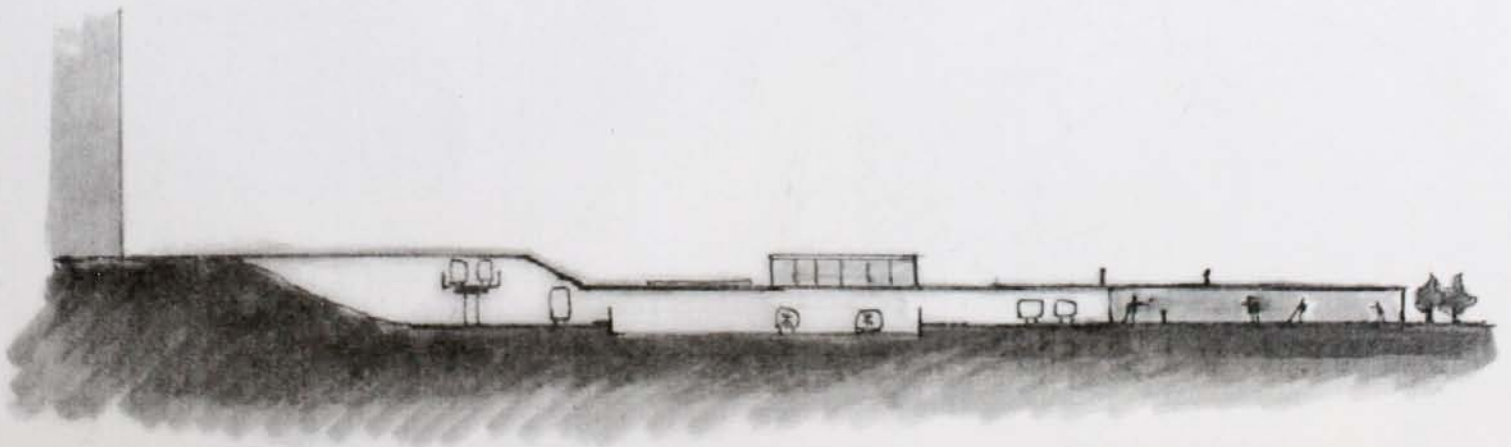
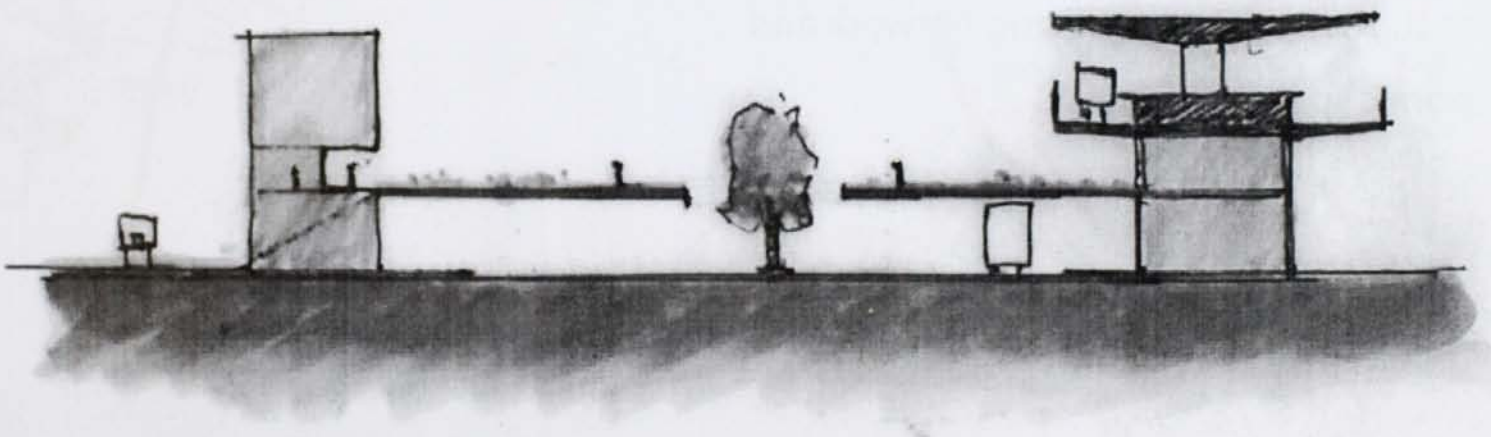
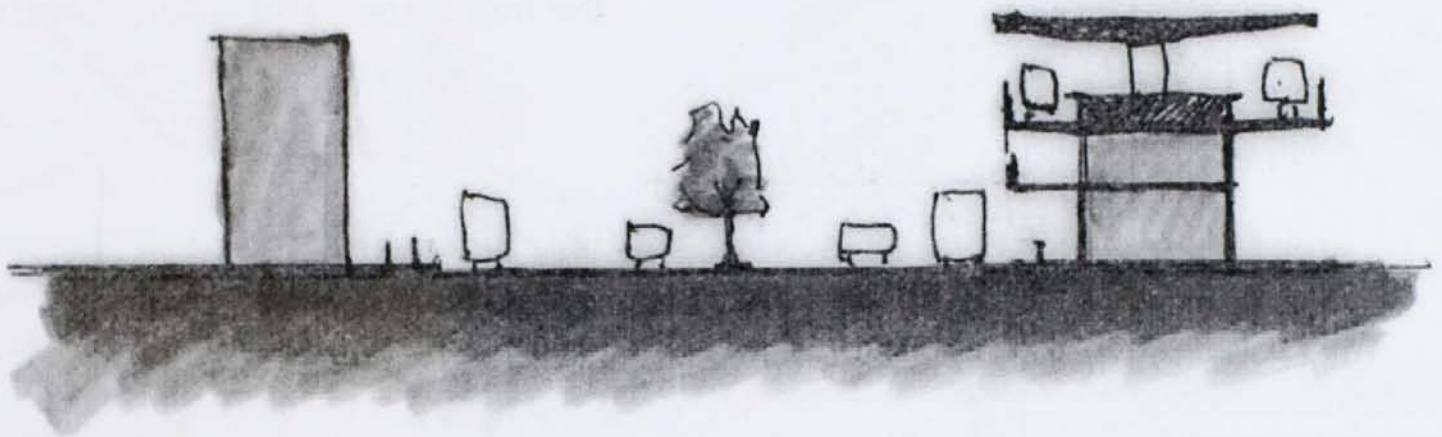


Proposed Programme

Indoor game hall, basketball / soccer facilities, swimming pool

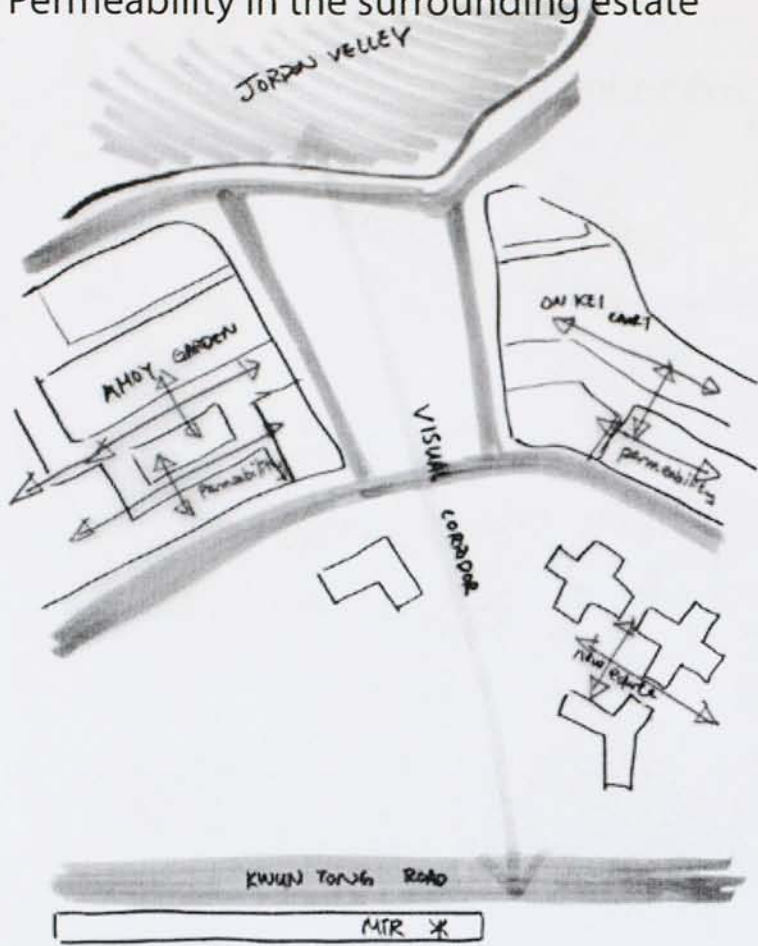
Community library, markets

Greenary , water features

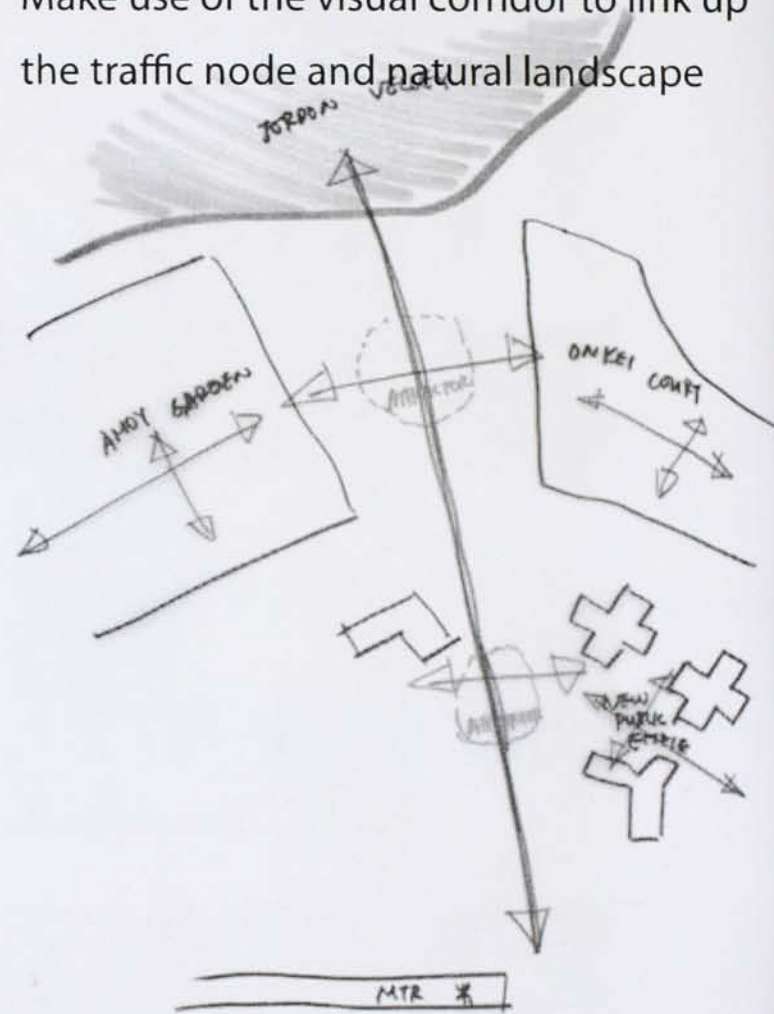


FINAL DESIGN

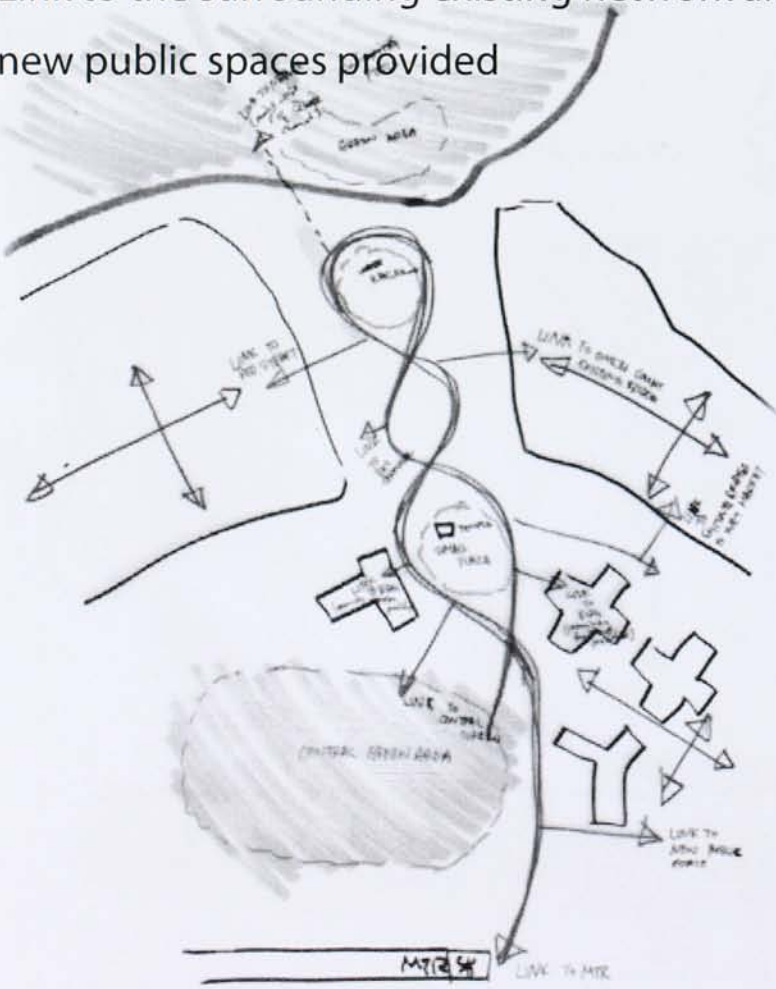
Idea
Permeability in the surrounding estate



Make use of the visual corridor to link up the traffic node and natural landscape



Link to the surrounding existing network and new public spaces provided



System

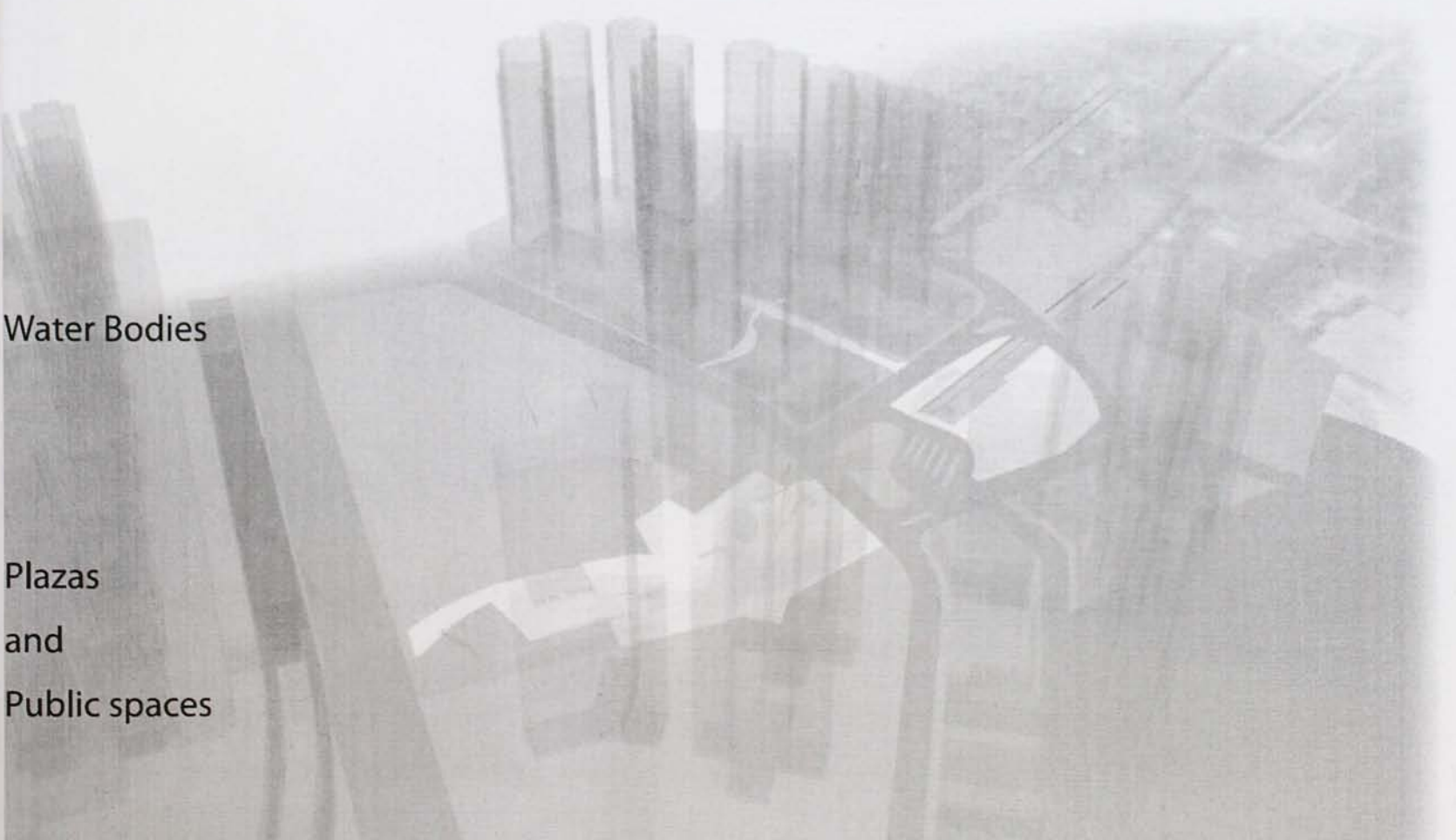
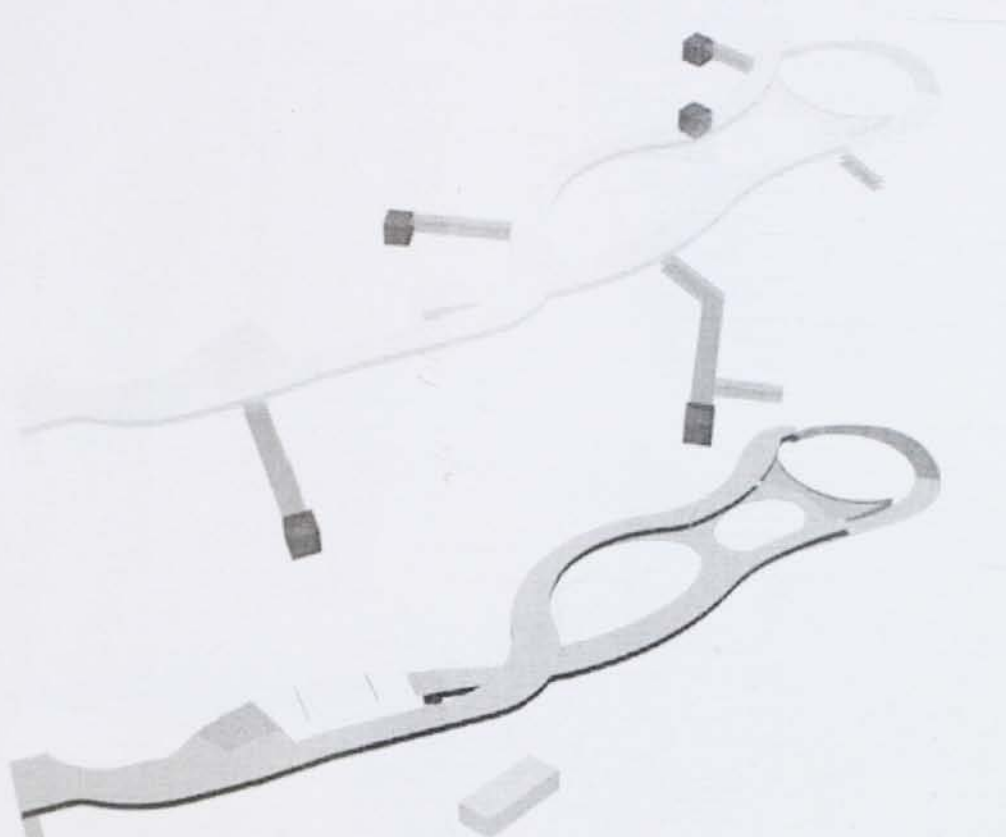
Connectors

Bridge

Communal
Spaces

Water Bodies

Plazas
and
Public spaces



Site Plan



Jordan Valley Swimming Pool

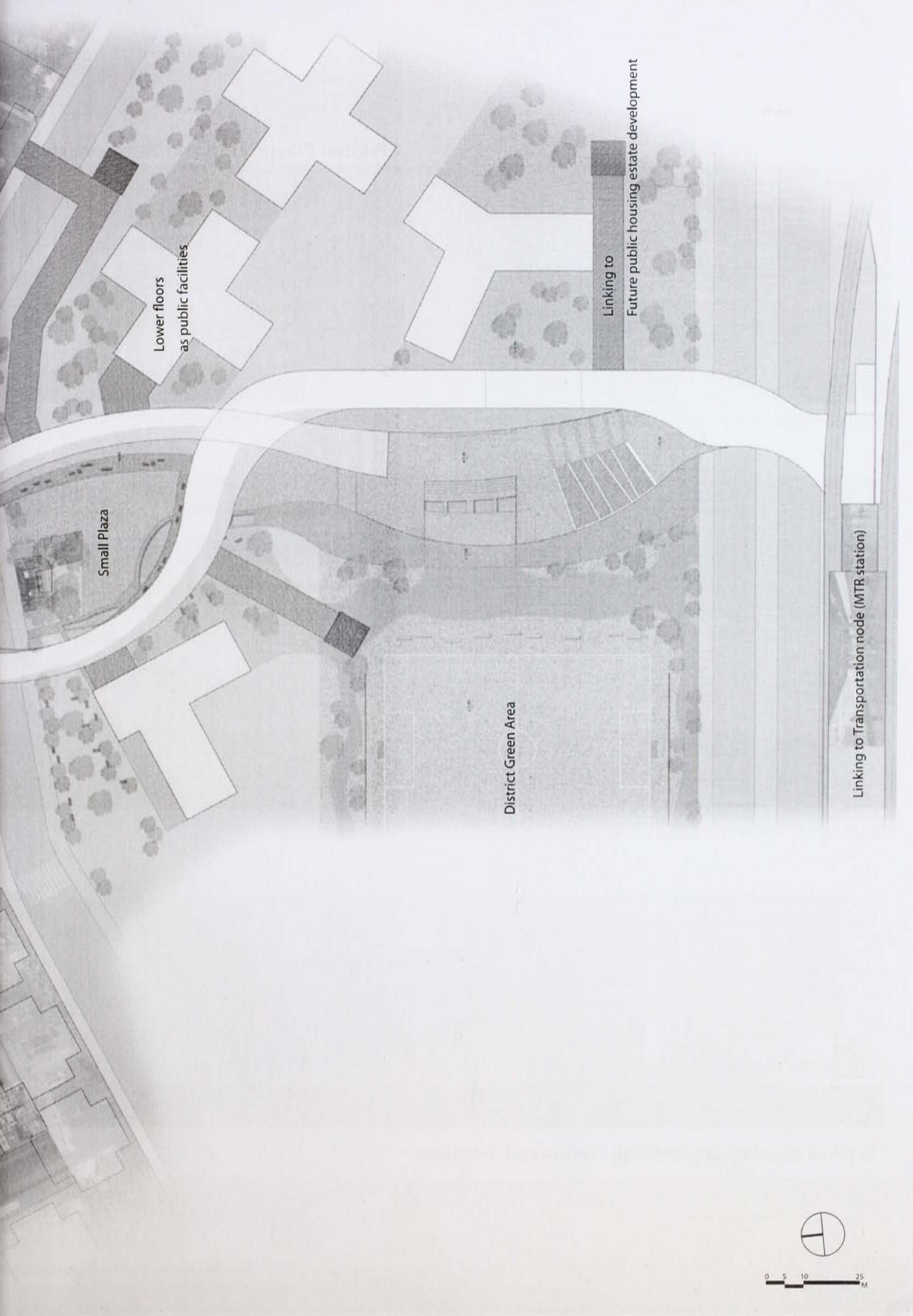
Water Channel
as walkable link
to Jordan valley

Children Playground

Bus Terminal

On Kei Court Shopping Centre

Pedestrian Street of Amoy Gardens



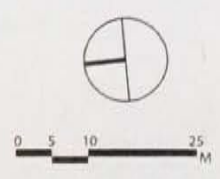
Small Plaza

Lower floors
as public facilities

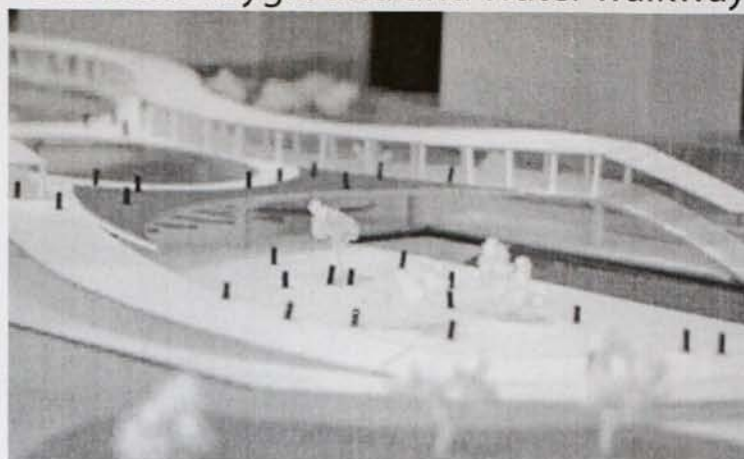
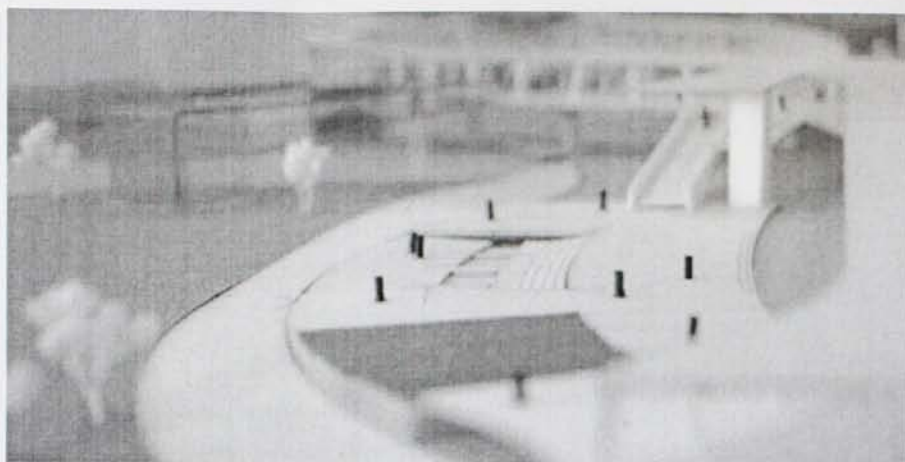
District Green Area

Linking to
Future public housing estate development

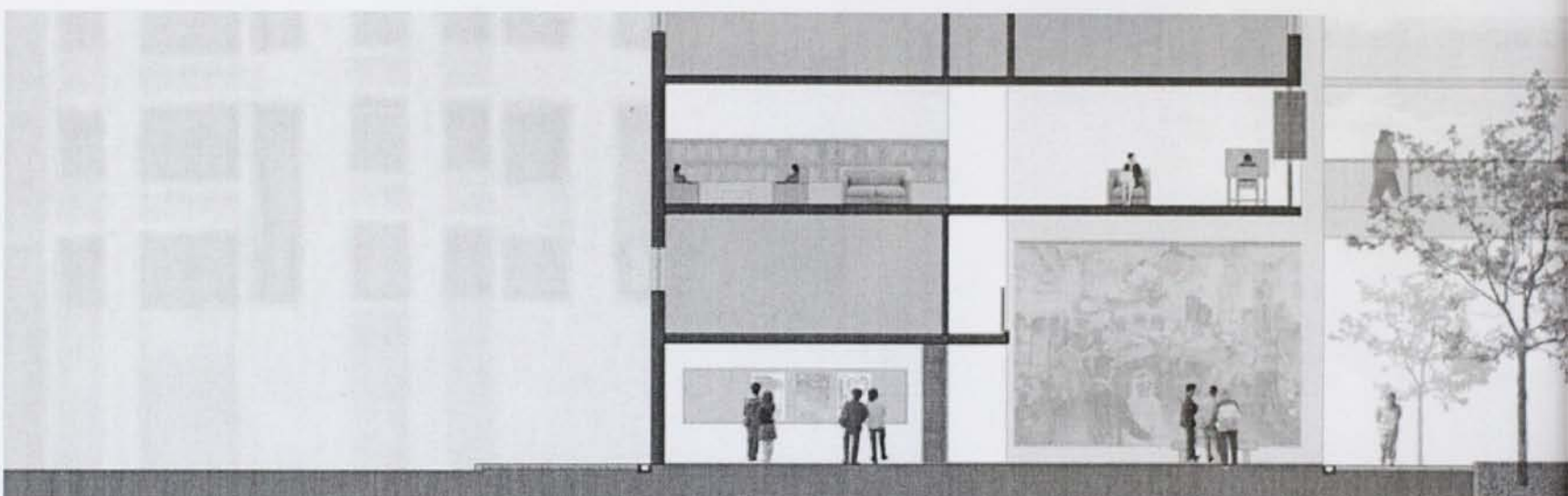
Linking to Transportation node (MTR station)



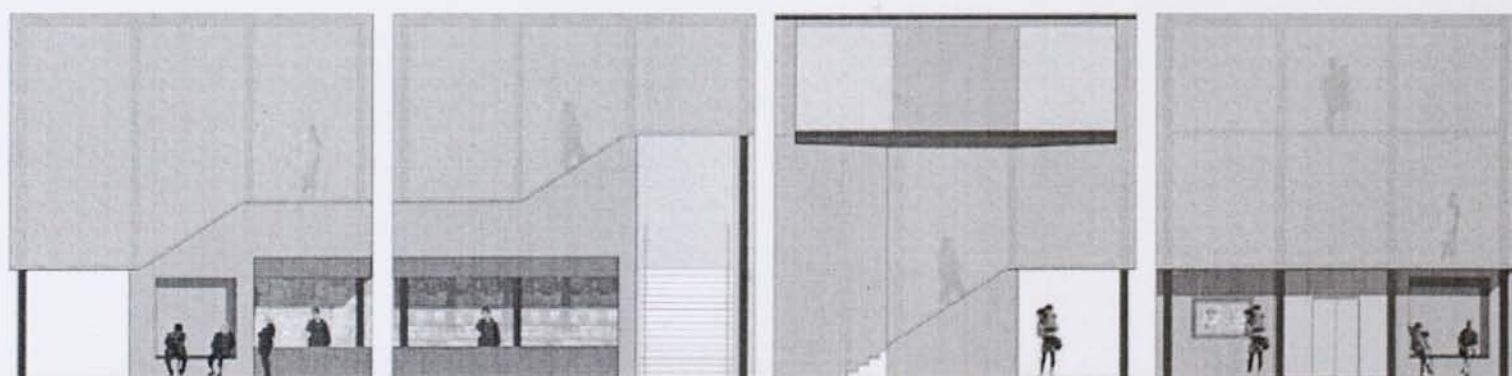
Children Playground and Water walkway



Water Plaza and District Open Space

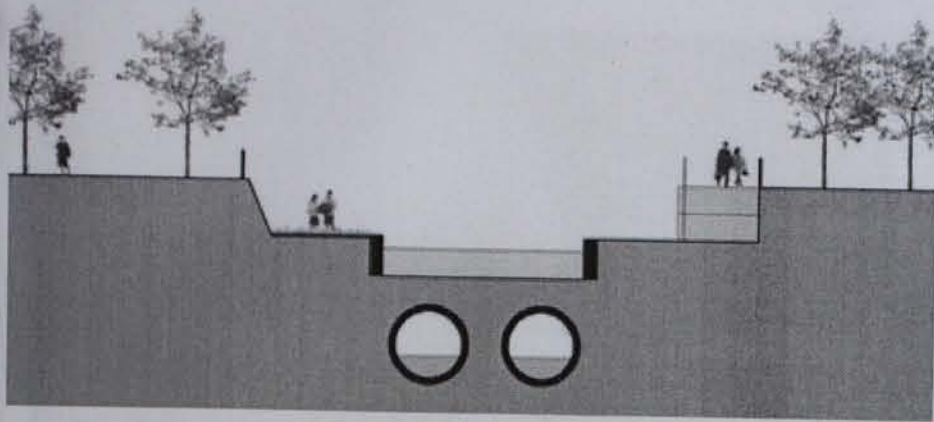


Small Plaza and Communal Space

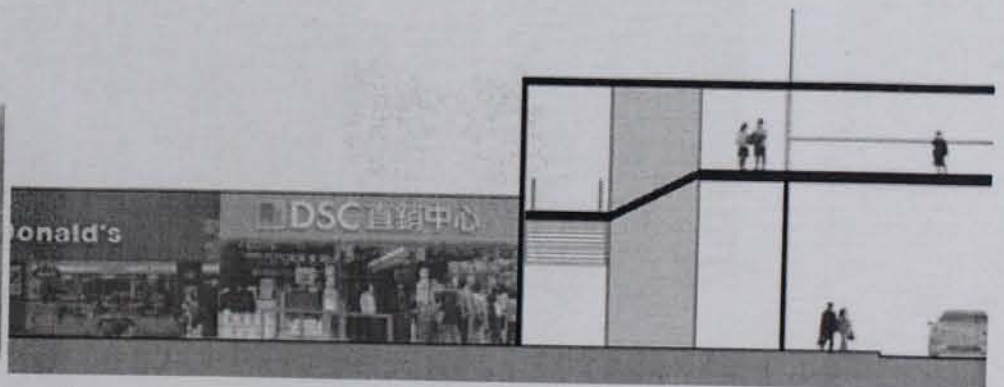


Vertical circulation providing communal facilities





Convert existing sewage channel to Water walkway

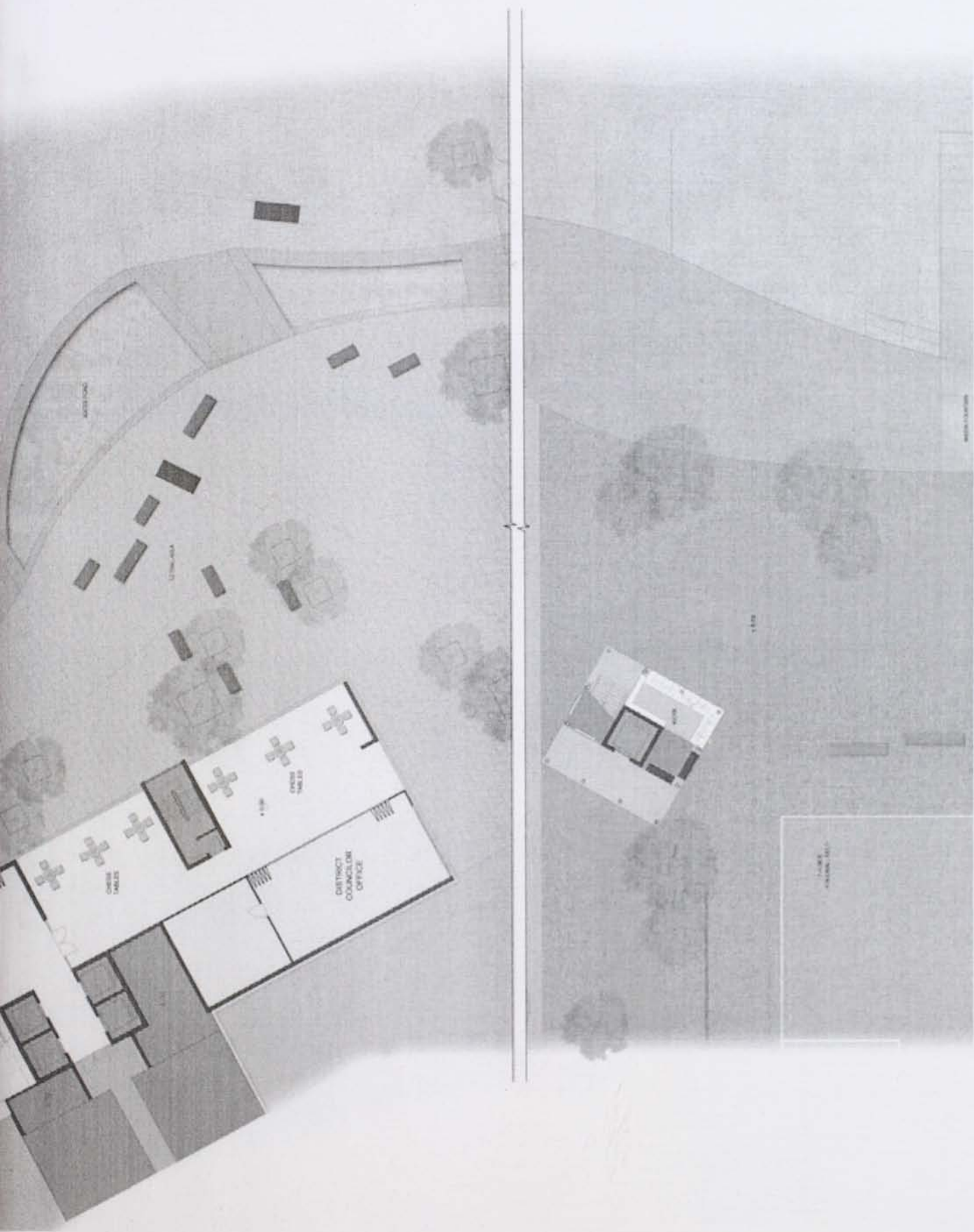


Link to the pedestrian street of Amoy Gardens



Partial Plan





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5:15pm		
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23 APR 2012 8:45pm		
10 OCT 2012 6:45pm		
- 1 NOV 2012 4:30pm		

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